This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An electronic thermostat for use with a heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch in parallel with the mechanical switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

2. (currently amended) A method of heating a beverage dispenser, the method comprising:

operating a mechanical switch to a closed circuit mode to apply power to a heater to heat the liquid from an initial temperature toward a target temperature, then opening the mechanical switch; and

operating a solid-state switch to a closed circuit mode to apply power to the heater to maintain the liquid substantially at the target temperature; [[and]]

wherein the mechanical switch and the solid-state switch [[being]] are controlled by, and coupled to a controller[[,]] and wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage.

3. (currently amended) In a beverage brewing apparatus, an electronic thermostat for use with a heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch in parallel with the mechanical switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating a liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

4. (currently amended) A method of heating a liquid for use with a heated beverage dispenser, the method comprising:

operating a mechanical switch to apply power to a heater to heat the liquid from an initial temperature toward a target temperature;

operating a solid-state switch in parallel with the mechanical switch to apply power to the heater to maintain the liquid substantially at the target temperature; and

the mechanical switch and the solid-state switch being controlled by, and coupled to a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage.

5. (currently amended) An electronic thermostat kit for use with a heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat kit comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch in parallel with the mechanical switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperatur; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

6. (currently amended) An electronic thermostat for use with a heated beverage dispenser having a container in which liquid is contained and a temperature modifier that is operable by electrical power to at least one of heat or cool the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the temperature modifier to change a temperature of the liquid from an initial temperature toward a target temperature;

a solid-switch in parallel with the mechanical switch through which electrical power is applied to the temperature modifier to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

7. (currently amended) A method of modifying the temperature of a liquid, the method comprising:

providing an electrical circuit with a mechanical switch in parallel with a solid-state switch;

~~operating~~ closing a mechanical switch to apply power to a temperature modifier to change the temperature of a liquid from an initial temperature toward a target temperature, [[and]] or

~~operating~~ closing a solid-state switch to apply power to the temperature modifier to maintain the liquid substantially at the target temperature.

8. (previously presented) The method of claim 7, wherein the temperature modifier is a cooling element.

9. (new) A method of heating a liquid with a heater comprising:

applying electrical power to the heater by closing a mechanical switch;

providing a solid-state switch in parallel with the mechanical switch;

when the liquid reaches a predetermined temperature, closing the solid-state switch and opening the mechanical switch, and

opening and closing the solid-state switch to provide intermittent power to the heater to maintain the liquid at a predetermined temperature.

10. (new) The method of claim 9, further comprising;

providing anti-arcing measures before closing the mechanical switch to prevent arcing between the contacts of the mechanical switch.

11. (new) The method of claim 10, wherein the anti-arcing measures include closing the solid-state switch briefly before applying electrical power to the heater by closing the mechanical switch.

12. (new) The method of claim 9 wherein the mechanical switch is of lower resistance than the solid-state switch.

13. (new) A method of cooling a liquid with a cooling mechanism comprising:

applying electrical power to the cooling mechanism by closing a mechanical switch;

providing a solid-state switch in parallel with the mechanical switch;

when the liquid reaches a predetermined temperature, closing the solid-state switch and opening the mechanical switch, and

opening and closing the solid-state switch to provide intermittent power to the cooling mechanism to maintain the liquid at a predetermined temperature.

14. (new) An apparatus for heating a liquid beverage comprising;

a container for the liquid beverage;

a heater inside the container, the heater being operable by electrical power to heat the liquid in the container;

an electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch in parallel with the mechanical switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

15. (new) The apparatus of claim 14 further comprising a temperature sensor that senses the temperature of the liquid in the container and provides feedback to the controller.

16. (new) The electronic thermostat of claim 14 further comprising a sensor that senses the level of the liquid in the container and provides feedback to the controller.

17. (new) The electronic thermostat of claim 1 further comprising a temperature sensor that senses the temperature of the liquid in the container and provides feedback to the controller.

18. (new) The electronic thermostat of claim 1 further comprising a sensor that senses the level of the liquid in the container and provides feedback to the controller.

19. (new) The apparatus of claim 2 wherein the target temperature is approximately 200 degrees Fahrenheit.

20. (new) The apparatus of claim 2 wherein the liquid is maintained at a temperature in the range of 180 - 210 degrees Fahrenheit.

21. (new) The apparatus of claim 9 wherein the target temperature is approximately 200 degrees Fahrenheit.

22. (new) The apparatus of claim 9 wherein the liquid is maintained at a temperature in the range of 180 - 210 degrees Fahrenheit.